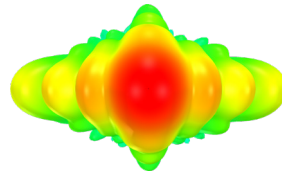
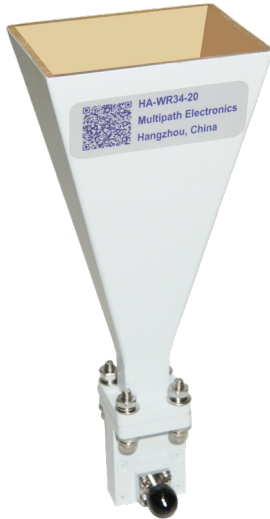




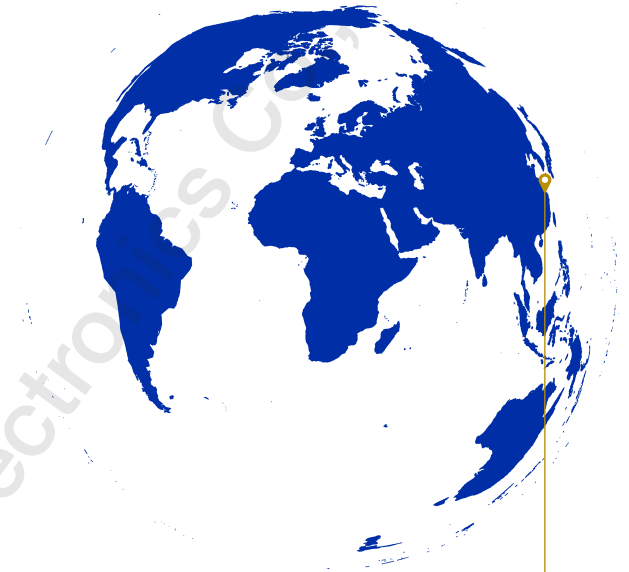
# Standard Gain Horn Antennas

21.0 - 34.0 GHz, 20 dBi

Radiation pattern



QR code



Hangzhou Multipath Electronics Co., Ltd., Zhejiang, China

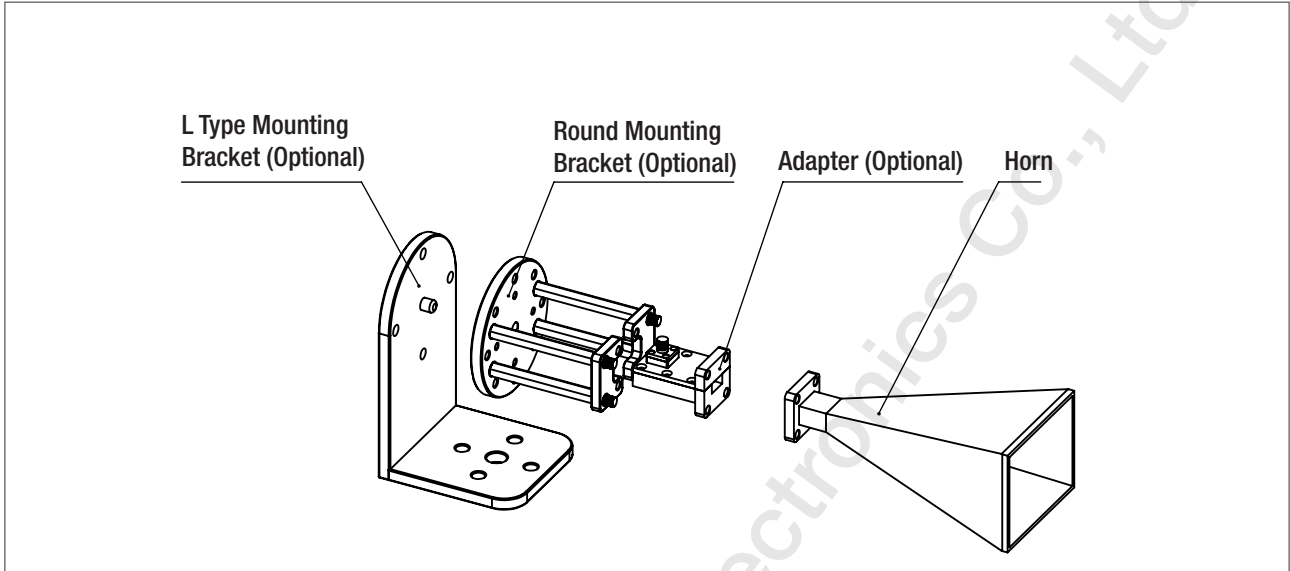
## ⚙️ Product specifications

Part number	HA-WR34-20	Polarization	Single linear
Antenna type	Pyamidal horn	Gain [dBi]	20 Typ.
Frequency range [GHz]	21.7 – 33.0	3dB beamwidth [deg]	E-plane: 15 Typ. H-plane: 15 Typ.
Waveguide band	WR34	Cross-polarization isolation [dB]	35 Typ.
Dimensions (H x W x L) [mm; inch]	55.0 x 43.5 x 137.2; 2.17 x 1.71 x 5.40	VSWR	1.25 Typ.
Weight (approx.) [kg; lb]	0.09; 0.198	Impedance [Ohms]	50
Material	Aluminum	RF connector	2.4-Female

Outline dimensions

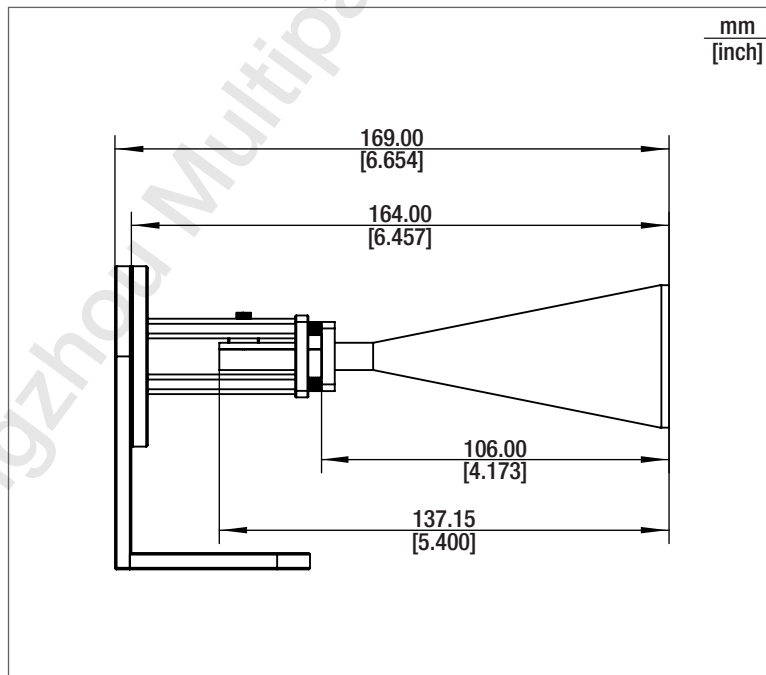
• Assembly dimensional drawing

Multipath Electronics provides complete standard gain horn antennas, forming mounting systems, integrated with (optional) waveguide to coaxial adapters, L type and round mounting brackets. The following figure shows the disassembly diagram of such a system.

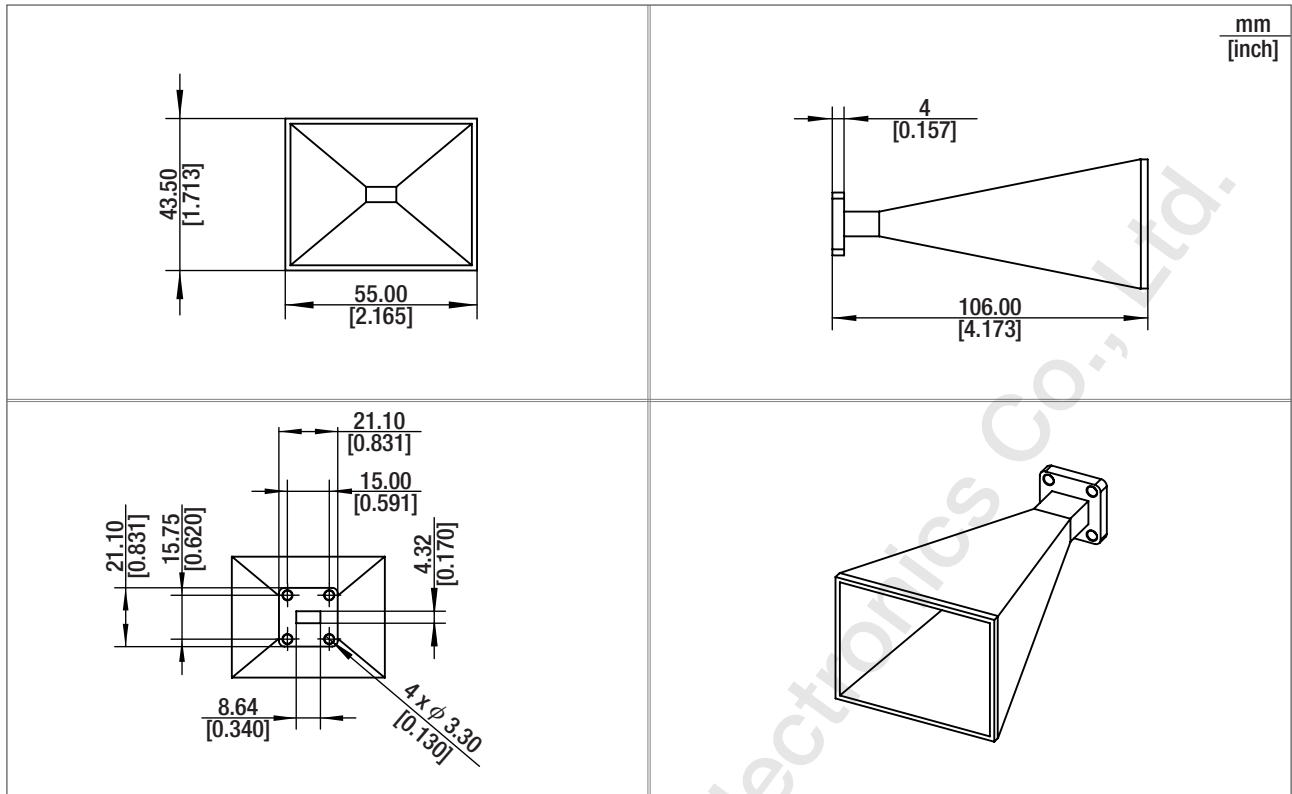


Side view of the mounting system.

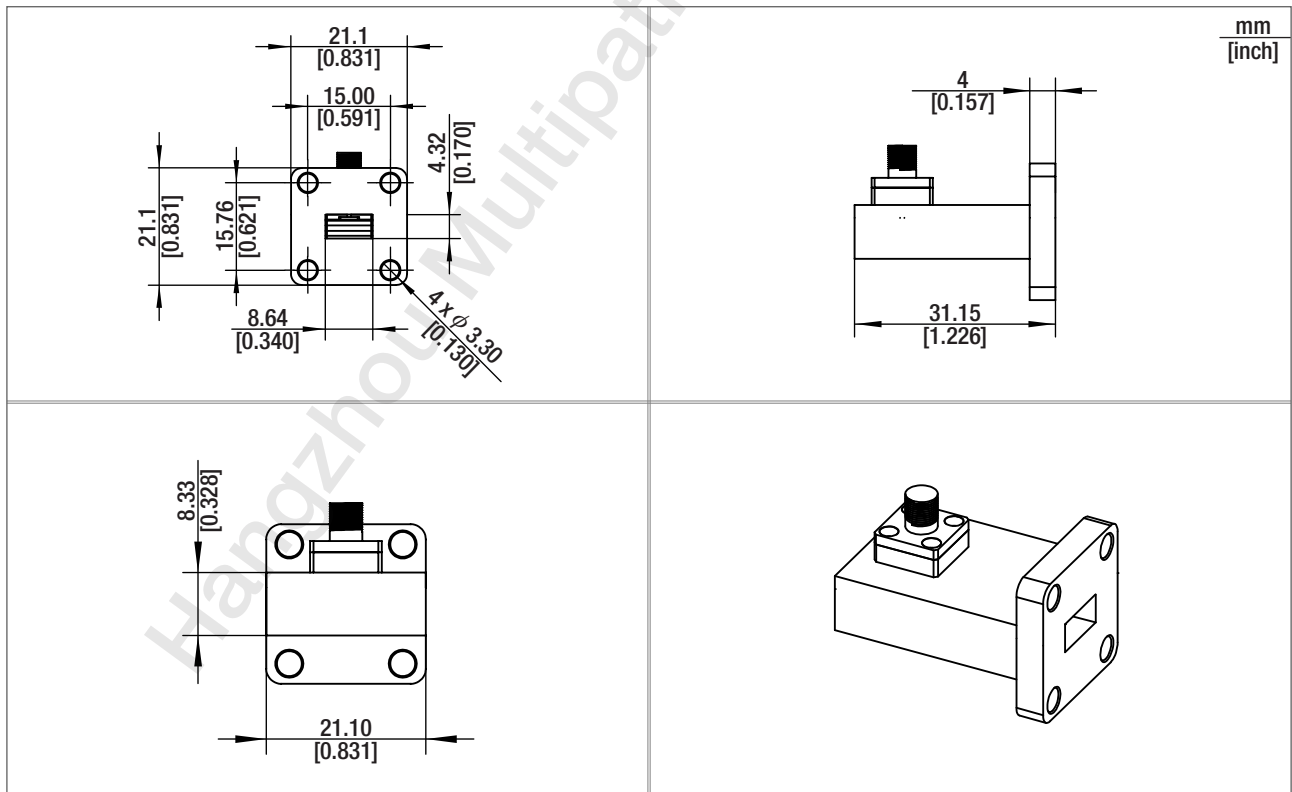
Detailed dimensions of the components will be given in subsequent diagrams.



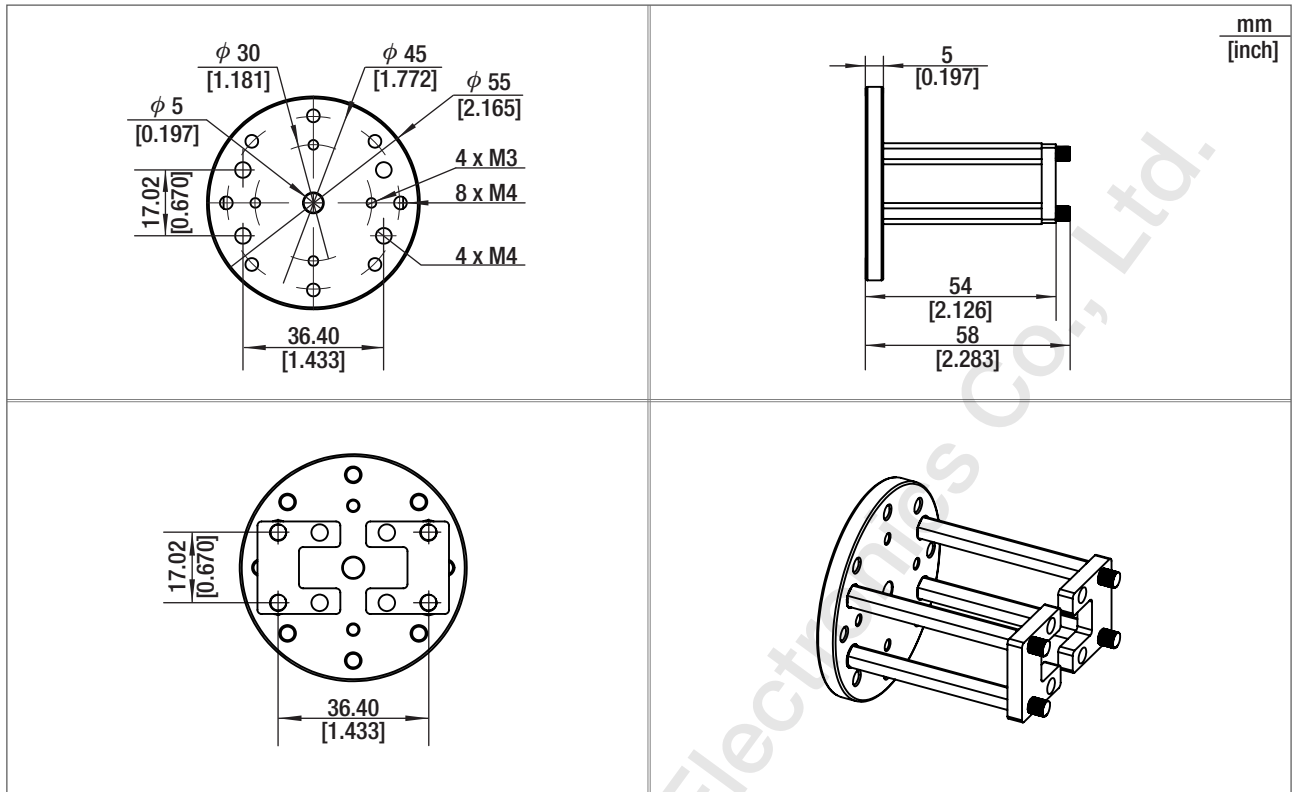
• Dimensional drawing: horn, HA-WR34-20



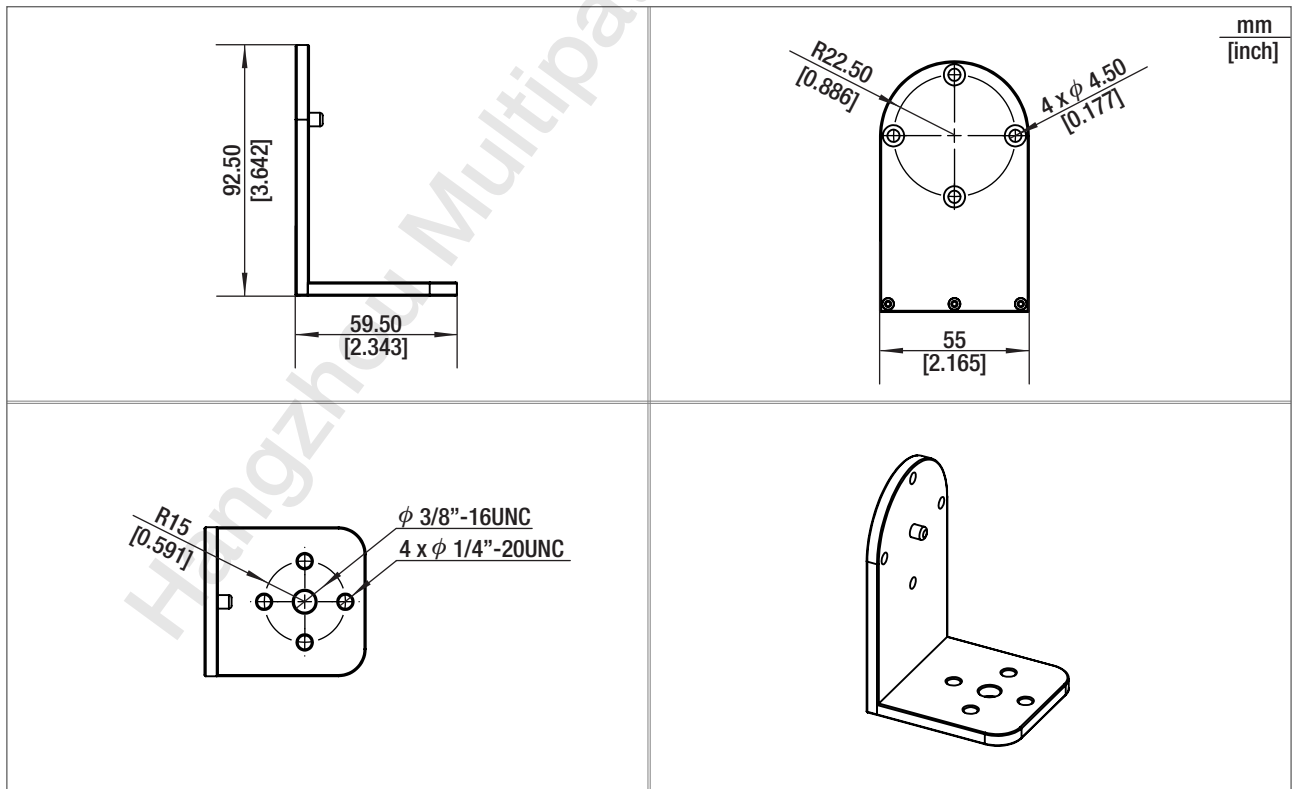
• Dimensional drawing: adapter, WR34-SMA-F (Optional)



• Dimensional drawing: round mounting bracket (Optional)

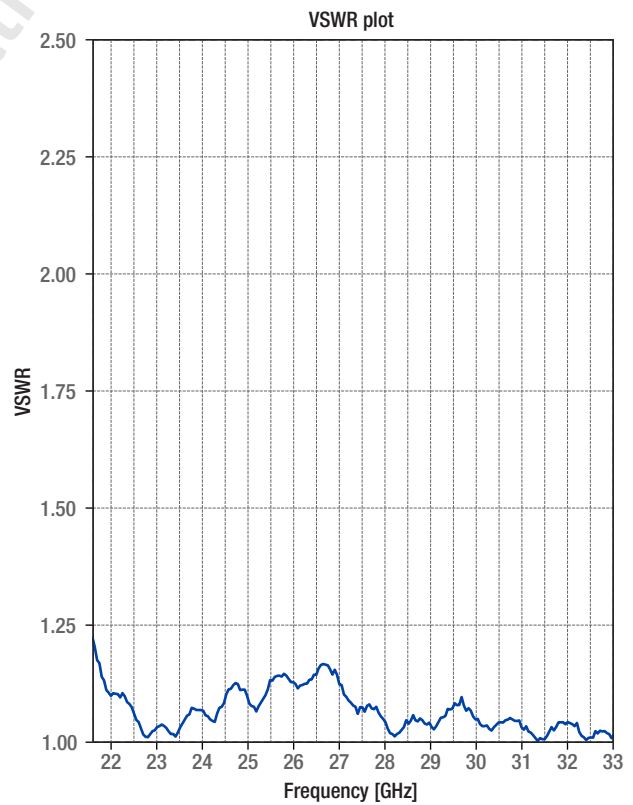
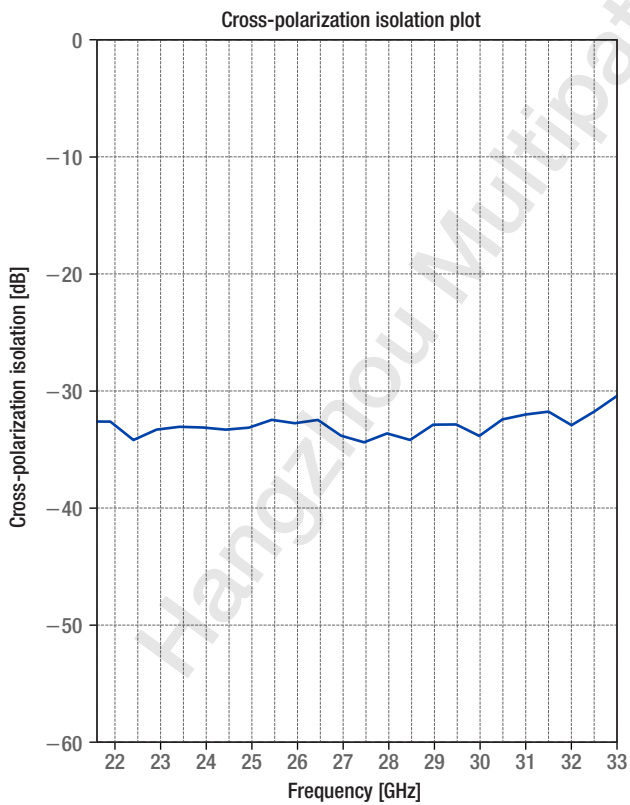
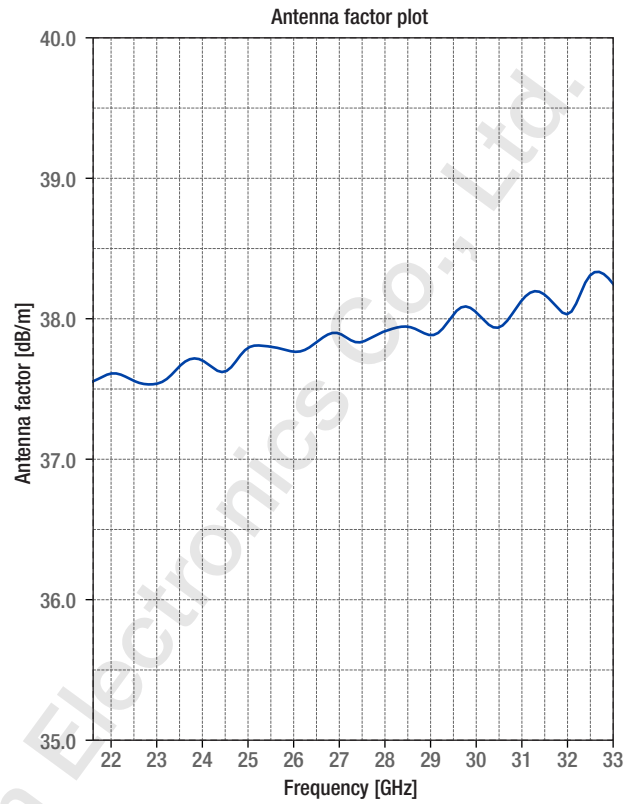
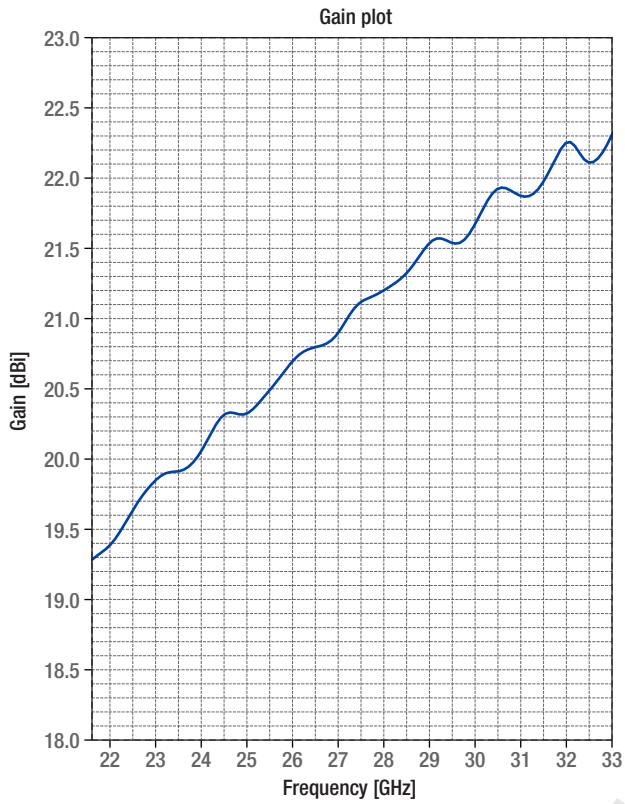


• Dimensional drawing: L type mounting bracket (Optional)



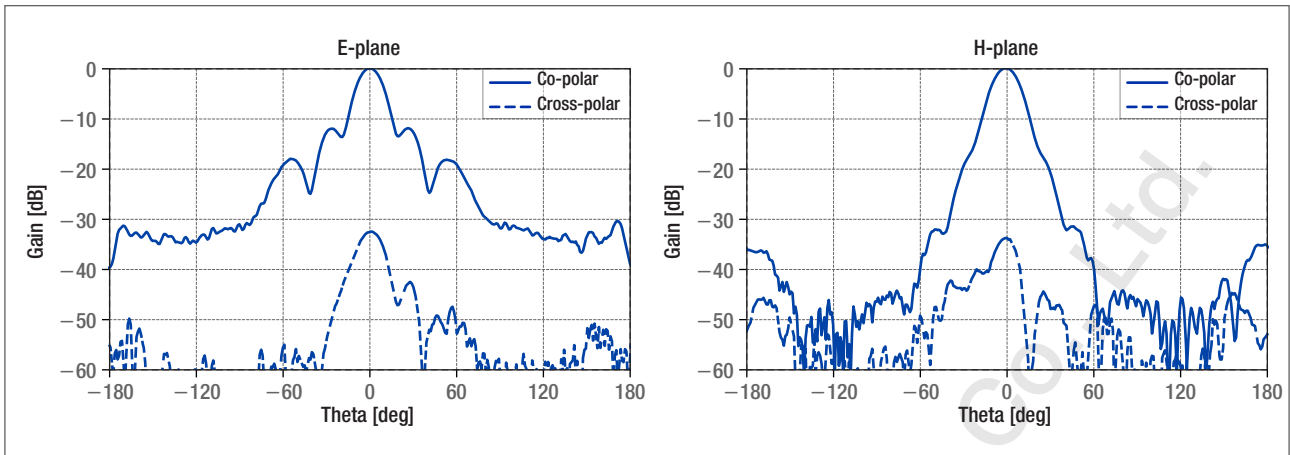
## Electrical characteristics

### Gain & Antenna factor & Cross-polarization isolation & VSWR

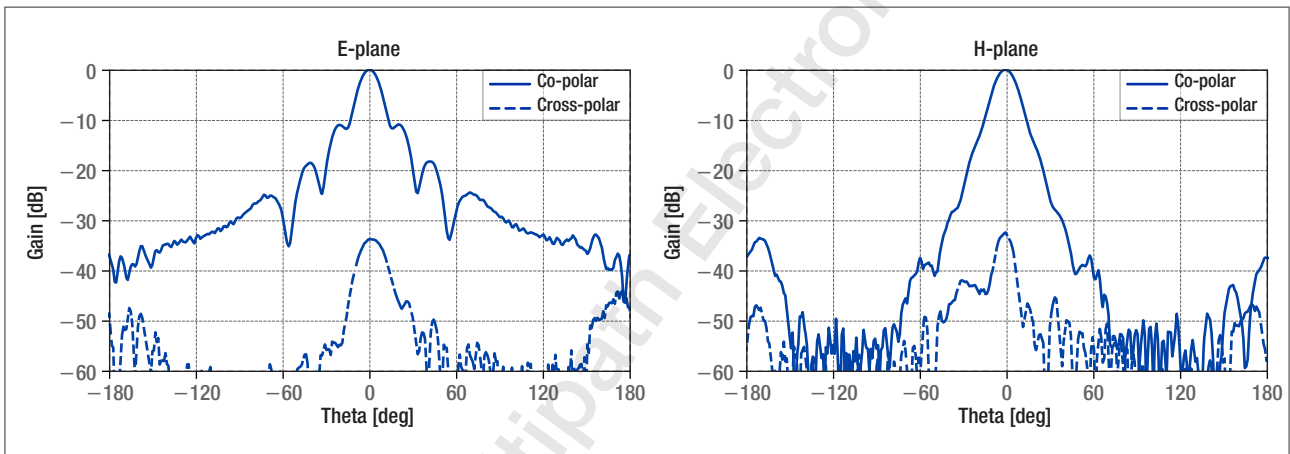


## • Radiation patterns

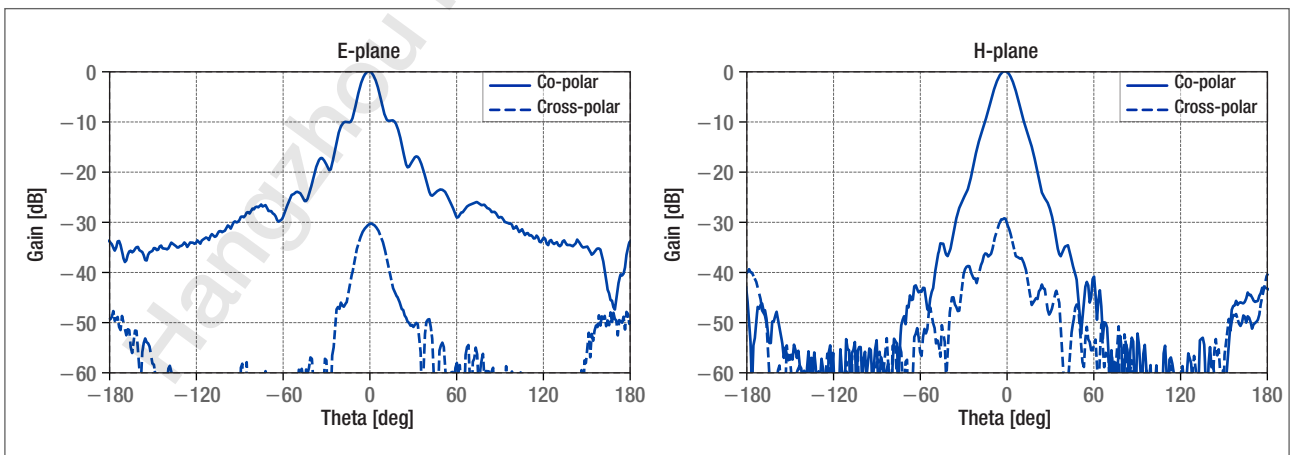
Patterns @ 22.0 GHz



Patterns @ 27.0 GHz



Patterns @ 33.0 GHz



• Data table

Frequency [GHz]	Gain [dBi]	Antenna factor [dB/m]	Cross-polarization isolation [dB]	VSWR
22.0	19.43	37.60	-32.42	1.11
22.5	19.66	37.57	-33.95	1.08
23.0	19.89	37.54	-33.08	1.02
23.5	19.97	37.64	-32.85	1.01
24.0	20.08	37.71	-32.91	1.06
24.5	20.35	37.62	-33.09	1.07
25.0	20.37	37.78	-32.92	1.11
25.5	20.52	37.80	-32.27	1.11
26.0	20.72	37.77	-32.55	1.12
26.5	20.84	37.82	-32.28	1.14
27.0	20.92	37.90	-33.59	1.14
27.5	21.15	37.83	-34.14	1.07
28.0	21.23	37.90	-33.40	1.05
28.5	21.35	37.94	-33.95	1.04
29.0	21.56	37.88	-32.67	1.04
29.5	21.57	38.01	-32.65	1.07
30.0	21.69	38.05	-33.61	1.04
30.5	21.94	37.93	-32.23	1.04
31.0	21.90	38.12	-31.83	1.03
31.5	21.99	38.17	-31.58	1.00
32.0	22.27	38.03	-32.71	1.04
32.5	22.13	38.30	-31.56	1.01
33.0	22.32	38.24	-30.24	1.01

Frequency [GHz]	E-plane, 3dB beamwidth	H-plane, 3dB beamwidth
22.0	17.25°	18.48°
27.0	14.18°	15.50°
33.0	12.17°	13.15°



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### Contact

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Technical specifications in this datasheet are subject to change without notice. Actual products may differ from the shown images.